

## ABSTRACT

Computer implemented methods for processing transactions involving chemical products include receiving at a server computer from a client computer transaction data that includes a product identifier. In response, testing of a sample of the identified product is scheduled and results of the sample testing are stored in a database. The results may be retrieved in response to a subsequent query from the user and sent over a network to the user. In another aspect, characteristics of a chemical product produced according to a particular formulation are determined, the formulation may be modified, and characteristics of a produce produced according to the modified formulation can be determined. A networked computer system that includes a server, a database, and a memory is configured to exchange data with client computers and is coupled to a database that stores chemical product data for a number of chemicals materials. The chemical product data can include, e.g., starting point formulations (i.e., recipes combining chemical materials to produce a product). The memory includes instructions that can configure the server to communicate over a computer network with a client computer. The client computer can communicate a product identifier to the server and, based on that identifier, the server may query the database to retrieve chemical product data which is then returned to the client computer.